

A Policy Research Framework for Gender-Based Mapping of Research Scholars After Obtaining Fellowships

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Among the 48.6% female population of India,¹ a small number of females are employed and even fewer women go on to become scientists. Moreover, women in higher education lag behind males with respect to acquiring a permanent position and senior status.^{2,3}

Women are found less likely to lead research teams, to hold large research grants, and to receive awards, which is evident from a few women recipients of Noble prize in science.⁴ One of the probable reasons for this situation is that most women researchers have reduced publication rate than male researchers,⁵ which decreases the probability and opportunity for women researchers to attain a permanent position and funding. Lower publication rate may arise because of gender bias or fewer women editors and reviewers or because of poor research quality of study. A recent study has highlighted that the reviewers of grants and publications look for broad and positive words such as “novel,” “therapy,” and “unique,” which are commonly used by male researchers.⁶ While women are less likely to emphasize their research with emphatic words, this could be another reason for lower publication and grant acceptance.

Women also have more social responsibilities than men and are expected to take these responsibilities more seriously.⁷ In India, the peer pressure from society and family on women is greater, which ultimately reduces the scientific vigor in women researchers.⁸ Thus, women researchers either settle for mediocre science or eventually leave their research career in between or change their field.

The Government of India has scaled up its flagship of *Beti Bachao Beti Padhao Yojana* (save the girl child and educate her) that ensures education to girl child.^{9,10} Further, India has reservation and age relaxation policies for women to support them to undertake higher studies and move forward to be independent researchers. More recently, India also introduced supernumerary seats for girls for BTech program in IITs realizing the potential of girls in engineering subjects.¹¹ Various women-oriented research fellowships are also increasingly being made available to promote women and their skills. However, women tend to discontinue research after doctorate or during doctorate, even though the

number of female research scholars is comparable to male research scholars. A lack of gender diversity has been studied extensively globally or in a specific region, but the question of “women discontinuing research” is still enigmatic.

Therefore, it becomes crucial to investigate the reasons of women discontinuing research and to develop education policies that reduce the chances of dropout. For this, the career path of research scholars could be mapped for 15 years after they have received government fellowships to pursue PhD. The reasons for discontinuing research could be documented based on a questionnaire, thus giving an opportunity to determine the prominent drivers for female career attrition.

Principal investigators from a range of scientific fields from top 10 or more research institutes could be contacted to retrieve information of their alumni career paths for 15 years. The alumni could be further contacted for any specific comments and feedback about factors associated with their career advancement. Such a study can include information for both the genders to evaluate the proportion of men and women discontinuing research and to evaluate the probable reason and its rate among women as well as among men. This proposed study would highlight the approximate time and temporary positions that a researcher requires before settling for a permanent position within and outside India.

Such study will enable us to identify the most common reasons for discontinuing research among female researchers and also among male researchers. The research can provide the necessary policy framework to formulate better schemes to promote research among females in India based on evidence generated from such policy research.

Author Contributions

Manjari Rain drafted the article. Akshay Anand conceptualized and critically revised the article.

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